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LETTER REGARDING REGULATORY REVIEW AND CONCURRENCE OF INTERIM
REMEDIAL ACTION USING IN SITU RECIRCULATION TREATMENT NTC ORLANDO FL
10/1/1997
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Department of Environmental Protection



Twin Towers Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Virginia B. Wetli
Secretary

October 1, 1997

Mr. Wayne Hansel
Code 18B7
Southern Division
Naval Facilities Engineering Command
P.O. Box 190010
North Charleston, South Carolina 29419-0068

09.01.04.0009

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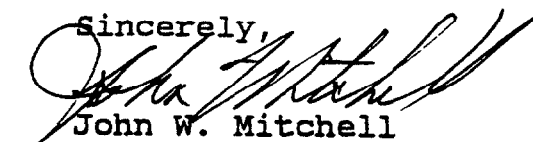
RE: Interim Remedial Action Using In-situ Recirculation Well
Treatment System, Revision 0, Naval Training Center Orlando.

Dear Mr. Hansel:

I have completed the technical review of the subject document dated September 1997 (received September 9, 1997). Please address the comments in the attached memorandum from Greg Brown, P.E. In regard to Mr. Brown's comment No. 2 related to groundwater reinjection, I have spoken with our Underground Injection Control Program (UIC) and they are in concurrence with our proceeding with the interim action.

If I can be of any further assistance with this matter, please contact me at (904) 921-9989.

Sincerely,


John W. Mitchell
Remedial Project Manager

Attachment

cc: Barbara Nwokike, SouthDiv
Lt. Gary Whipple, NTC Orlando
Nancy Rodriguez, USEPA Region 4
Bill Bostwick, FDEP Central District
John Kaiser, ABB Environmental, Orlando
Bob Cohose, Bechtel Environmental, Knoxville
Steve McCoy, Brown and Root, Oak Ridge
Patricia Kingcade, OGC/Trustee File

cc: Mark Salvetti

TJB

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JJC

JJC

ESN

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Memorandum

Florida Department of Environmental Protection

TO: John Mitchell, Remedial Project Manager, Technical Review Section

THROUGH: Tim Bahr, P.G., Supervisor, Technical Review Section *JB*

FROM: Greg Brown, P.E., Professional Engineer II, *GB*
Technical Review Section

DATE: September 18, 1997

SUBJECT: Interim Remedial Action using in-situ Recirculation Well Treatment System, Revision 0, prepared by Bechtel Environmental, Inc., for Operable Unit 4, Naval Training Center Orlando, FL.

I reviewed the subject document dated September 1997 (received September 9, 1997). J. R. Manning, P.E., Florida Licensed Professional Engineer No. 0051803, is the engineer of record for this engineering document. I have the following minor comments:

1. What is the definition of "in situ" in regards to this technology? Primary treatment (i.e., stripping and aeration) appears to be "ex situ," whereas enhancement of aerobic bioremediation seems to conform to the typical usage of "in situ," as I understand it. Has the design team considered possible risks due to by-products of aerobic degradation that are of higher toxicity than the parent chemicals of concern?
2. This specific UVG configuration operates as a groundwater extraction system with aboveground treatment followed by reinjection of partially treated groundwater. Reinjection is prohibited under State and federal rule and code if the injected fluids exceed federal drinking water standards. There is an exception, however, under federal Part 144, Underground Injection Control Program, §144.13(c). Briefly stated, reinjection of treated groundwaters as part of a groundwater cleanup strategy approved by the U.S. EPA pursuant to CERCLA or RCRA is not prohibited (see the referenced subsection for detailed conditions). U.S. EPA Region IV Administrator's approval of the subject work plan is therefore required prior to implementation.
3. Note for your information that the Bureau of Air Resources has revised their maximum VOC mass emissions to 13.2 pounds/day for petroleum sites (refer to Rule 62-770, F.A.C., September 1997).

MEMORANDUM
John Mitchell
September 18, 1997
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4. Balancing the flows between the two pumps appears to be a critical factor for successful operations. Appendix C implies a feedback system between the two pumps without details. Is it possible to flood the above ground treatment canister and cause a spill if the extraction pump exceeds the capacity of the injection pump? Please provide additional information on the interlocks and alarm conditions of the proposed system.
5. In Appendix B, Remedial Design, Ms. Amy T. Twitty, Florida Professional Geologist, No. 0001703, of SBP Technologies, Inc., provided a certification page for the Remedial Design (my review copy was received unsealed). When this certification page is sealed by Ms. Twitty, what geology portion of the SBP's Remedial Design will it apply to? Does Mr. Manning, Florida Professional Engineer, No. 0051803, of Bechtel Environmental, Inc., certify the engineering portions of SBP's design as the engineer with responsible charge, or was it delegated to another engineer? Please distinguish the responsibilities of the geologist, as well as the engineer of record and any delegated engineers.

If you have any questions, call me at (904) 488-3935.